DRAFT Maintenance Concept Remains Consistent With Prior Fiscal Year

Statement Of Work
For
REBUILD OF AMPLIFIER ASSEMBLY, AM-6545B/GRC-193B(V)
NSN 5895-01-270-5095
P/O AN/GRC-193B

SOW-07-PMM122-8D865B-1/1

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STATEMENT OF WORK FOR THE AMPLIFIER ASSEMBLY, AM-6545B/GRC-193B(V) NSN 5895-01-270-5095 P/O AN/GRC-193B

- 1.0 <u>Scope</u>. This Statement of Work (SOW) establishes and sets forth tasks and identifies the work efforts that shall be performed by the Contractor (for purposes of this SOW, Contractor is defined as the commercial or government entity performing the rebuild) in the rebuild effort of the Ampifier Assembly, AM-6545B/GRC-193B(V) (hereafter known as the Amplifier Assembly). This document contains requirements to restore the Amplifier Assembly to Condition Code "A". Condition Code A is defined as "serviceable/issuable without qualification, new, used, repaired or reconditioned material which is serviceable and issuable to all customers without limitation or restriction, including material with more than six months shelf-life remaining."
- 1.1 <u>Background</u>. Rebuild is defined as "That maintenance technique to restore an item to a standard as near as possible to original or new condition in appearance, performance, and life expectancy. This is accomplished through a maintenance technique or complete disassembly of the item, inspection of all parts or components, repair or replacement of worn or unserviceable elements using original manufacturing tolerances and/or specifications and subsequent reassembly of the items."
- 2.0 <u>Applicable Documents</u>. The following documents form a part of this SOW to the extent specified. Unless otherwise specified, the issues of these documents are those listed in the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto which is in effect on the date of solicitation. In the event of conflict between the documents referenced herein and the contents of the SOW, the contents of this SOW shall be the superseding requirement.

2.1 Military Standards

MIL-STD-129 DoD Standard Practice for Military Marking

MIL-STD-2073-1D DoD Standard Practice for Military Packaging

2.2 Other Government Documents and Publications. The issues of those documents cited below shall be used.

TM-07749B Operators and Organizational Maintenance Manual

For AN/GRC-193B(V)

TM-07749B-12/1 General Support, Direct Support Maintenance and

Depot Maintenance Manual for AN/GRC-193B(V)

SL-4-09213A Repair Parts List for AN/GRC-193B

TI-5820-25/22 Electromagnetic Environmental Effects (E³)

Procedures For Installation of Communication Equipment on U.S. Marine Corps Platforms

Engineering Drawing

755017C3000, CAGE 01365

Power Amplifier, AM/6545B/GRC-193B

DoD 4000.25-1-M Militay Standard Requisistioning and

Issue Procedures (MILSTRIP)

MCLB0372 Engineering Change Proposal

MCLB0373 Engineering Change Proposal

MCLB0380 Engineering Change Proposal

Military Handbooks (For Guidance)

MIL-HDBK-61 Configuration Management Guidance

2.3 Industry Standards

ANSI/ISO/ASQC Q9001-2000 Quality Management Systems-Requirements

JESD625-A Requirements for Handling Electrostatic-Discharge-

Sensitive (ESDS) Devices

Industry Standards (For Guidance)

ANSI/EIA-649 National Consensus Standard for Configuration

Management

Copies of Military Standards and Specifications are available from the DOD Single StockPoint,Document Automation and Production Service, Building 4/D, 700 Robbins Avenue,Philadelphia, Pa. 19111-5094, commercial telephone number (215) 697-2179 or DSN 442-2179, or http://www.dodssp.daps.mil/. Copies of other government documents and publications required by contractors in connection with specific SOW requirements shall be obtained through the Contracting Officer: Contracts Department (Code 891), P.O. Drawer 43019, 814 Radford Blvd., Marine Corps Logistics Bases, Albany, Georgia 31704-3019, commercial telephone number (229) 639-6476 or DSN 567-6476. Copies of engineering drawings, if applicable, shall be obtained from Supply Chain Management Center, Attn: Code 583-1, 814 Radford Blvd., Suite 20320, Albany, Georgia 31704-0320, commercial telephone number (229) 639-6476 or DSN 567-6476.

- 3.0 Requirements.
- 3.1 General Tasks. In fulfilling the specified requirements, the Contractor shall:
- a. Provide materials, labor, equipment, facilities and missing/repair parts, necessary to inspect, diagnose, restore, and test and calibrate the Amplifier Assembly. Upon completion of rebuild, the subject item shall be Condition Code "A."
- b. Conduct in-process and final on-site testing for witness by Marine Corps Systems Command (PMM122).
- 3.2 <u>Detail Tasks</u>. The following tasks describe the different phases for rebuild of the Amplifier Assembly.
- 3.2.1 <u>Phase I Pre-Induction</u>. The contractor shall perform a pre-induction inspection analysis for each Amplifier Assembly using the Contractor Facility's diagnosis, inspection and testing techniques to determine extent of work and parts required. These findings shall be annotated on the Pre-Induction Checklist (Appendix A).
- 3.2.2 <u>Phase II Rebuild</u>. After pre-induction tests and inspections have been completed, repair of the Amplifier Assembly shall be accomplished by the contractor in accordance with this SOW. Deficiencies noted on the Pre-Induction Checklist (Appendix A) during Phase I shall be repaired/replaced. Components or assemblies shall not be disassembled for replacement of parts unless that part has failed, or the component assembly wherein the part is located is disassembled for repair. Any Modification Instructions (MIs) or Engineering Change Proposals (ECPs) not previously applied shall be incorporated.

a. Hardware.

- (1) Replace broken, unserviceable and/or missing hardware including nuts, bolts, screws, washers, turn lock fasteners, mandatory replacement items, safety and one-time use items, etc., in accordance with this SOW. Unserviceable would include any of the above that failed to function properly.
- (2) Ensure proper hardware locking devices are present on all moving mechanical assemblies.
- (3) Hardware normally supplied with commercial parts shall be used unless specifically prohibited.
- 3.2.3 Phase III Inspection, Testing and Acceptance

- a. The contractor shall conduct Inspection, Testing and Acceptance of the Amplifier Assembly in accordance with this Statement of Work, TM-07749B, TM-07749B-12/1, SL-4-09213A, TM-4750-15/2, TI-5820-25/22, Engineering Drawing 755017C3000.
- b. The Contractor shall be responsible for conducting required tests and shall ensure all necessary personnel are notified prior to completion of the final acceptance. Acceptance tests shall be held at the Contractor's facility. MCSC, PMM122, Albany, Georgia representatives shall be given a minimum of two weeks notice prior to commencement of acceptance testing.
- c. The Contractor shall be responsible for correcting any deficiencies identified during inspection/testing. MCSC, PMM122, Albany, Georgia representatives may require the Contractor to repeat tests or portions thereof, if the original tests fail to demonstrate compliance with this SOW.

3.2.4 Packaging, Handling, Storage and Transportation (PHS&T).

- a. The Contractor shall be responsible for preservation and packaging of items being rebuilt under the terms of this Statement of Work. Items scheduled for long term storage or shipment to overseas destinations shall be in accordance with the Level "A" requirements of MIL-STD-2073-1D, Appendix A, Table A.VI., Electronic Equipment. Items scheduled for domestic shipment for immediate use or short-term storage shall be in accordance with level B requirements.
 - b. Marking for shipment and storage shall be in accordance with MIL-STD-129.
- c. The Marine Corps will provide the Contractor with the shipping address(es) for delivery of the repaired equipment. The contractor shall be responsible for arranging for shipment to the pre-designated site(s). The Marine Corps will be responsible for transportation costs associated with shipping the subject equipment to and from the Contractor.
- 3.3 <u>Configuration Control</u>. The contractor shall apply configuration control procedures to established configuration items. The contractor shall not implement configuration changes to an item's documented performance or design characterisitics without prior written authorization. If it is necessary to temporarily depart from the authorized configuration, the contractor shall prepare and submit a Request for Deviation. ANSI/EIA-649 (paragraph 5.3.4) provide guidance for prepaing this configuration control document.
- 3.3 Government Furnished Equipment (GFE)/Government Furnished Materiel (GFM). The Management Control Activity (MCA) (Code 571-1) will coordinate GFE/GFM requests and maintain a central control system on all government owned assets in the contractor's possession. The MCA will forward a GFE Accountability Agreement to the contractor for signature on an annual basis to establish a chain of custody and identify property responsibilities for Marine Corps assets. The contractor is to acknowledge receipt of GFM to the MCA within 15 days of receipt. This can be done by mailing a copy of the DD1348 to Materiel Management Department,

Management Control Activity (Code 573-2), 814 Radford Blvd., STE 20320, Albany, GA 31704-0320) or faxing a copy to commercial phone number (229) 639-5498 or DSN 567-5498.

- 3.5 <u>Contractor Furnished Materiel</u>. The contractor may requisition materiel as required in the performance of the SOW through the DoD Supply System. DoD 4000.25-1-M (MILSTRIP) Chapter 11 provides guidance to contractors on the requisitioning process. The contractor's decision to utilize CFM procured from the DoD Supply System shall be based upon cost effectiveness, availability of materiel and the required completion/delivery date.
- 3.6 <u>Electrostatic Discharge (ESD) Control Program</u>. The contractor shall establish, implement and document an ESD control program following the guidelines provided in JESD625-A. ESD protective measures shall be used during manufacturing, handling, inspection, testing, marking, packaging, storing and transporting ESD sensitive components.
- 3.7 <u>Electromagnetic Environmental Effects (E³) Procedures</u>. The Contractor shall plan for and use proper (E³) control procedures in the rebuild process and shall utilize TI-5820-25/22 in conjunction with the detailed requirements specified in this document.
- 3.8 Quality Assurance Provisions. The Contractor shall provide and maintain a minimum, adheres to the requirements of ANSI/ISO/ASQC Q9001-2000, Quality Management Systems Requirements. The program shall ensure quality throughout all areas to include, processing, assembly, inspection, test, maintenance, and preparation for delivery and shipping. Unless otherwise specified in the contract, the Contractor shall be responsible for performance of all inspection requirements. The Government reserves the right to perform any of the inspections set forth in the contract where such inspections are deemed necessary to assure products and services conform to the prescribed requirements.
- 3.9 Acceptance. The performance of the Contractor and the quality of work delivered, including all equipment furnished and documentation written or compiled, shall be subject to in-process review and inspection during performance. Inspection may be accomplished in-plant or at any work site or location, and Marine Corps MCSC, (PMM122) representatives shall be permitted to observe the work or to conduct an inspection. Final inspection and acceptance testing shall be conducted at the Contractor's Facility. Final acceptance shall be conducted on 100 percent of items to verify that the units meet all requirements.
- 3.10 <u>Rejection</u>. Failure to comply with any of the specified requirements listed herein shall be reason for rejection by MCLB, MCSC, (PMM122), Albany, representative. The Contractor shall, at no additional cost to MCLB, Albany, Georgia, correct the deficiencies and repeat the verification until an acceptable compliance with acceptance test procedures is demonstrated.

Pre-Induction Checklist Amplifier Assembly, AM-6545B/GRC-193B(V) P/O AN/GRC-193B

M - Missing

- 1. Inspect for dirt, dust, sand, etc.
- 2. Inspect for rust and/or corrosion damage.
- 3. Inspect for any physical damage to unit, cuts, dents, cracks, or broken pins.

U - Unserviceable

- 4. Ensure that all screws, washers, nuts, bolts, etc. are attached.
- 5 Inspect for dry rot.

S - Serviceable

<u>An</u>	pplifier Assembly AM-6545B Inventory /Serviceability check:	Condition	Remarks
1.	Meter, RF		
2.	400W-100W Switch		
3.	Ready (RDY) Light		
4.	Transmit (XMT) Light		
5.	Tune (TUN) Light		-,1,,1,
6.	Fault Light, Filament (FIL)		
7.	Fault Light, Power Amplifier (PA)		
8.	Fault Light. Coupler (CPLR)		
9.	Circuit Breaker (PA CB)		•
10.	Antenna Coupler Circuit Breaker (ANT CPLR CB)		
11.	Fan/Lamp Test Switch		
12.	Connector, RT RF, J5		
13.	Connector, RT CONT, J2		
14.	Connector, RT DC PWR, J3		
15.	Connector, RF, J4		
16.	Connector PA-CPLR, J1		

APPENDIX A